



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

Order 4181 1 JUNE 2018

RBW109-3130-85-133

Job Sheet 175827



Part No: RBW109-3130-85-133

Job Qty: 1 ea

Part Name: Tool Kit, Tail Rotor Pitch Control Shaft Bearing Remove/Install



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 4/11/18

Job Tracking No:

Due Date: 6/1/18

Created By: Marie Lajeunesse

Type: SOLD

Description:

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Purchasing	1 pcs		5/31/18	0.00	0.00	Purchasing		CMF 18/5/23
110	Packaging	1 pcs		5/31/18	0.00	0.00	Packaging2		CMF 18/5/23
120	QC	1 pcs		5/31/18	0.00	0.00	QC6		38
130	Small Fab	1 pcs		6/1/18	0.00	0.50	Small Fab-4		MLC 9-89 DAS 38
140	QC	1 pcs		6/1/18	0.00	0.00	QC5		38
150	Packaging	1 pcs		6/1/18	0.00	0.00	Packaging3-1		GAISS 18-05-30 9-89
160	QC21-FG	1 Ea		6/1/18	0.00	0.00	QC21		21 MAY 21 2018

Part Op 100 - Issue PO to ARROW TECH MACHINE WORKS P/O: 39580 MANUFACTURE RBW109-3130-85-133 AS18
Descriptions: PER DWG -Certificate of conformity is required

130 - 1-Engrave placard RB41011 using marktronic engraver 2-Transfer drill Dart placard RB41011 into Pelican case APP-1490-E 3-Deburr holes and remove chips from case. 4-Rivet Dart placard to Pelican case 5-Glue placard RBW109-3130-85-133-17 to RBW109-3130-85-133 foam as per DWG. 6-Glue foam to case and pack case as per DWG.

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Job BOM

Part / Item	Component Name	Quantity	Operation	Container
RBW109-3130-85-133P	Tool Kit, Tail Rotor Pitch Control Shaft Bearing Remove/Install	1 (1 ea)	100-Purchasing	S073712
97524A032	Blind Rivet	4 Ea (4 ea)	130-Small Fab	S031249
APP-1490-E	Pelican case	1 Ea (1 ea)	130-Small Fab	207431
RB41011	Dart Tooling Placard, Aluminum	1 Ea (1 ea)	130-Small Fab	S072431
RBW109-3130-85-133-11	Lid Foam	1 (1 ea)	130-Small Fab	S072432
RBW109-3130-85-133-13	Bottom Tool Cushion	1 (1 ea)	130-Small Fab	S072434
RBW109-3130-85-133-17	Tool Placard	1 Ea (1 ea)	130-Small Fab	S075376

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-Purchasing	RBW109-3130-85-133P	1	0	0
130-Small Fab	97524A032	4	207	0
	APP-1490-E	1	0	0
	RB41011	1	930	0
	RBW109-3130-85-133-11	1	0	0
	RBW109-3130-85-133-13	1	0	0
	RBW109-3130-85-133-17	1	0	0

Part Specifications



Container No: S073722



Part: RBW109-3130-85-133

Job No: 175827

Serial No/Batch: S073722

Revision: 1

Inspector:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL: 1 613 532-5200
Email: sales@dartaero.com
www.dartaerospace.com

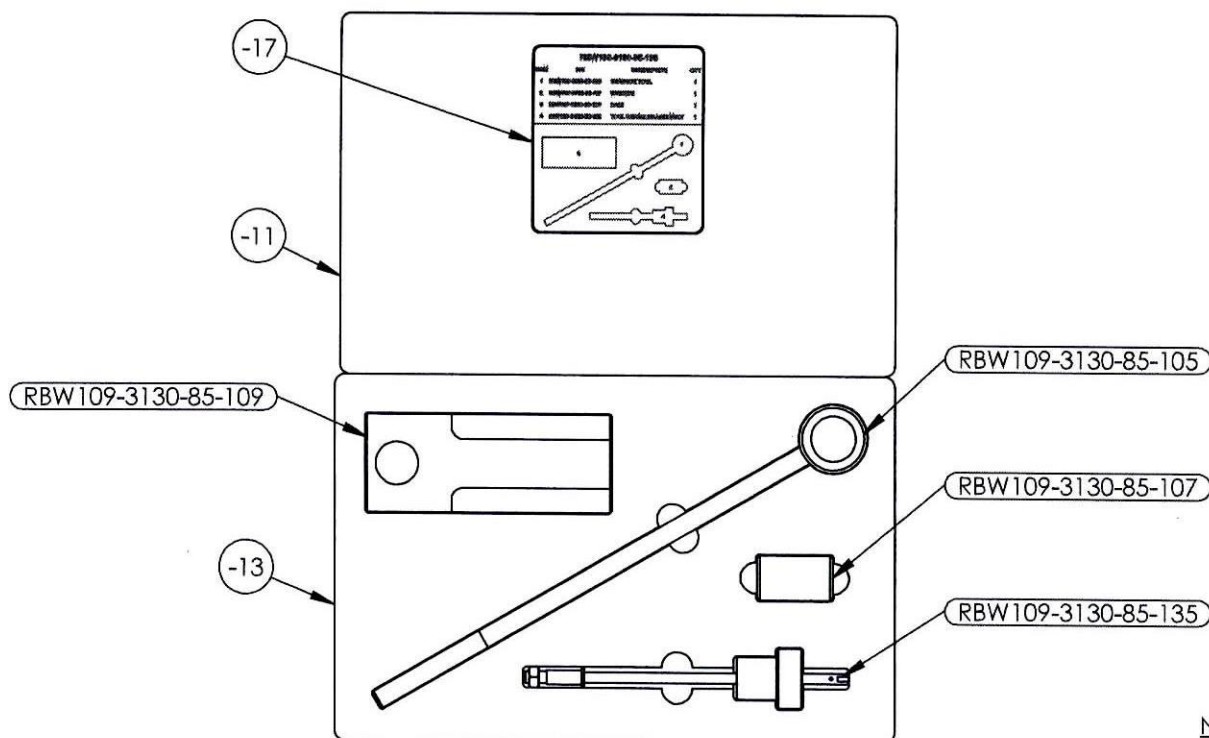
Date: 05/23/18

Specifications could not be found.

Plex 4/11/18 8:17 AM Dart.lajeunesse.marie

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		RELEASED FOR PRODUCTION.	7/25/2016	RJC	JAG



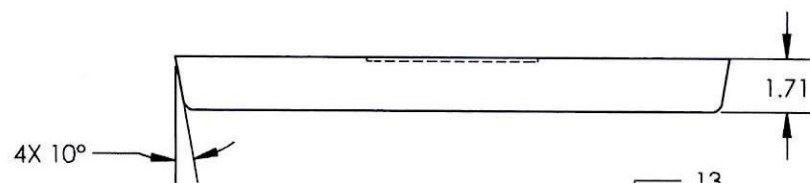
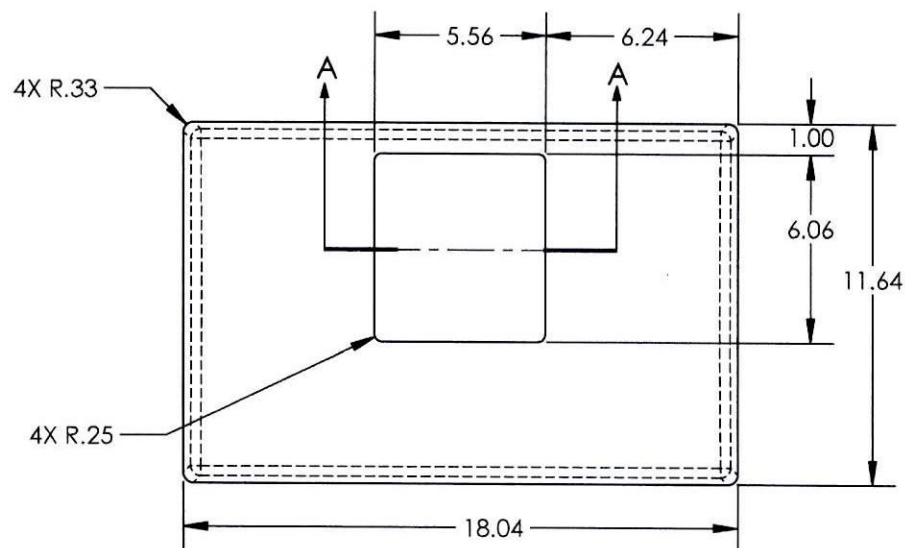
NOTE:
REF. AGUSTA T/N 109-3130-85-133.

ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
			-1	1	REACTOR TOOL		RBW109-3130-85-105	1
			-3	1	WRENCH		RBW109-3130-85-107	1
			-5	1	BASE		RBW109-3130-85-109	1
			-7	1	TOOL INSTALLER ASSEMBLY		RBW109-3130-85-135	1
		B/O	-9	1	CASE	PLASTIC	PELICAN CASE #APP-1490-E	N/S
		B/O	-11	1	LID FOAM	Y20, BLACK	1.71 X 11.64 X 18.04 (I.R. SPECIALTIES)	2
		B/O	-13	1	BOTTOM TOOL CUSHION	Y20, BLACK	2.64 X 11.85 X 18.21 (I.R. SPECIALTIES)	3
		B/O	-15	1	DART PLACARD	ALUMINUM	#RB41011	N/S
			-17	1	TOOL PLACARD	PLASTIC		4

DART AEROSPACE	
TITLE TOOL KIT, T/R PITCH CONTROL SHAFT BEARING REM/INSTL	
DWG NO. RBW109-3130-85-133	REV 1
MAT'L HEAT TREAT FINISH SPEC	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± 5° .X ± .1 SURFACES = 125/✓	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
DRAWN BY:	CLOUGH
CHECKED:	DUERFELDT
OPPS APPR:	ANDERSON
QA APPR:	LINDSAY
APPROVED:	GILBERT
SCALE	1:6
DATE	3/5/2015
SHEET 1 OF 4	

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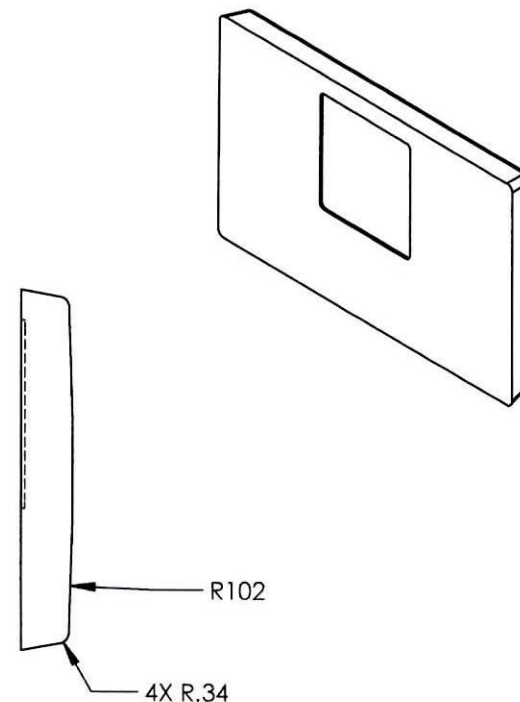
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				APPROVED



SECTION A-A

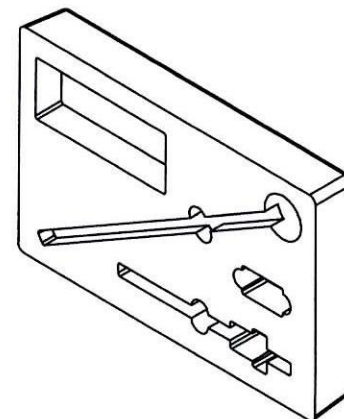
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LID FOAM



DART AEROSPACE	
TITLE TOOL KIT, T/R PITCH CONTROL SHAFT BEARING REM/INSL	
DWG NO. RBW109-3130-85-133-11	REV 1
MAT'L Y20, BLACK	UNLESS OTHERWISE SPECIFIED
HEAT	DIMENSIONS ARE IN INCHES
TREAT	.XXX ± .010 FRACTIONS ± 1/8
FINISH	.XX ± .03 ANGLES ± 1°
SPEC	.X ± .1 SURFACES = 125/
DRAWN BY: CLOUGH	1. BREAK ALL SHARP EDGES
CHECKED: DUERFELDT	.015 x 45° OR .015R
OPPS APPR: ANDERSON	2. DIMENSIONAL LIMITS APPLY
QA APPR: LINDSAY	AFTER PLATING
APPROVED: GILBERT	3. INTERPRET DIM AND TOL PER
	ASME Y14.5M-2009
	USED ON MODEL
	AW119
SCALE 1:6	DATE 3/4/2011
	SHEET 2 OF 4

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED



BOTTOM TOOL CUSHION



TITLE	TOOL KIT, T/R PITCH CONTROL SHAFT BEARING REM/INSTL
-------	--

DWG NO. RBW109-3130-85-133-13

REV	
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MATL	Y20, BLACK
------	------------

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
XX $\pm .010$ FRACTIONS $\pm 1/8$
X $\pm .03$ ANGLES $\pm 1^\circ$
 $\pm .1$ SURFACES = 125/

DRAWN BY:	CLOUGH
-----------	--------

CHECKED:	DUERFELDT
----------	-----------

OPPS APPR:	ANDERSON
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QA APPR:	LINDSAY
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APPROVED:	GILBERT
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USED ON MODEL

AW119

SCALE 1:6

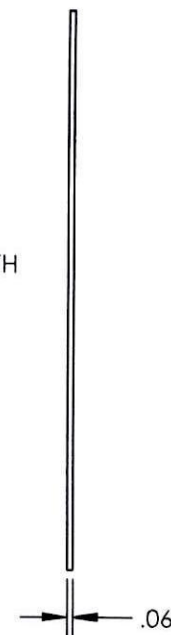
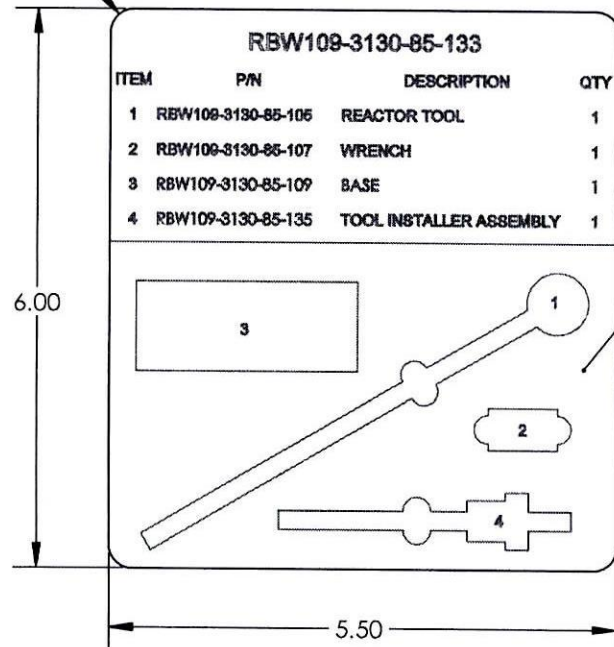
DATE	3/4/2011
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SHEET 3 OF 4

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REV	ECR	DESCRIPTION	DATE INITIAL APPROVED

4X R.25



NOTE:
USE PDF.

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TOOL PLACARD

DART AEROSPACE	
TITLE TOOL KIT, T/R PITCH CONTROL SHAFT BEARING REM/INSTL	
DWG NO. RBW109-3130-85-133-17	REV 1
MAT'L PLASTIC	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
HEAT TREAT	.XXX ± .010 FRACTIONS ± 1/8
FINISH	.XX ± .03 ANGLES ± 1°
SPEC	.X ± .1 SURFACES = 125 ✓
DRAWN BY: CLOUGH	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED: DUERFELDT	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR: ANDERSON	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR: LINDSAY	USED ON MODEL
APPROVED: GILBERT	AW119
SCALE 1:2	DATE 3/4/2011 SHEET 4 OF 4



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **PO039580**

Supplier: ARR002-VU
Arrow Tech Machine Works
29751 E. Enid Road,
Unit C
Eugene, OR 97402 USA
Phone: 541-780-6938
Fax: 458-215-4938

PO No: PO039580
PO Date: 4/11/18
Due Date: 6/2/18
Purchase Order
Revision:
Revision Date:
Ship-To Contact: Phone:

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Ship To:

Pymt Terms: Net 30
Freight Terms:
Special Comments:

Items

Line Item	Part	Supplier Part No	Item No	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
1	RBEGM-745-064P			Removal/Installation-Motor Pump Cartridge (Forward Main Tank) WO 175829 AND WO 475826	Firmed	5/11/18	2 Ea	0 Ea	2 Ea	\$1,736.93/Ea	\$3,473.86
2	RBW109-3130-85-133P			Tool Kit, Tail Rotor Pitch Control Shaft Bearing Remove/Install WO 175827 AND WO175893	Firmed	5/25/18	2 Ea	0 Ea	2 Ea	\$1,766.68/Ea	\$3,533.36
3	RBEL133M-6503-101P			Mounting Tool	Firmed	5/18/18	2 Ea	0 Ea	2 Ea	\$1,753.73/Ea	\$3,507.46
4	RBD29828P			Elastomeric Bearing Removal Tool WO 175825	Firmed	6/4/18	2 Ea	0 Ea	2 Ea	\$551.91/Ea	\$1,103.82
5	RBW6305G00431-3GP			Hoisting Flange Main Gear Box WO 175830	Firmed	5/29/18	4 pcs	0 pcs	4 pcs	\$1,013.90/pcs	\$4,055.60
6	RBE117-11181W1P			Main Rotor Drive Mounting Tool WO 175881, WO 475882, WO 175883 WO 475885	Firmed	5/11/12	4 Ea	0 Ea	4 Ea	\$2,603.98/Ea	\$10,415.92
7	RBW6305G00132-3GP			AW139 Gimbal Bushing WO 175863, WO 175864, WO 175864	Firmed	5/29/18	3 pcs	0 pcs	3 pcs	\$1,080.39/pcs	\$3,241.17

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PURCHASE ORDER

Items											
Line Item	Part	Supplier Part No	Item No	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
8	RBEM632V1001101P			Main Gear Box Sling WO 175862 AND WO 175897	Firmed	5/9/18	2 Ea	0 Ea 2x	2 Ea	\$4,164.83/Ea At 18/05/18	\$8,329.66
9	RBT18420P			Wing Pin Puller WO 175858	Firmed	5/25/18	2 Ea	0 Ea	2 Ea	\$1,159.85/Ea	\$2,319.70
Grand Total:										\$39,980.55	

Order Notes

Procurement Quality Clauses
 A005 RIGHT OF ENTRY
 A008 FIRST ARTICLE INSPECTION (FAI) BY SELLER, (DOCUMENTATION SENT TO DART AEROSPACE)
 A012 CHEMICAL AND PHYSICAL TEST REPORTS
 A016 PERSONNEL QUALIFICATION
 A017 RAW MATERIAL IDENTIFICATION (AS APPLICABLE)
 A026 CERTIFICATION OF MATERIAL CONFORMANCE
 A041 QUALITY MANAGEMENT SYSTEM
 A042 DART NOTIFICATION BY SUPPLIER
 A043 RETENTION OF QUALITY DOCUMENT

 A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM
 A049 SUPPLIER AWARENESS

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail; please visit www.dartaerospace.com for further explanation.

Plex 5/9/18 11:45 AM dart.lavoie.chantal



ARROW TECH MACHINE WORKS

Certificate of Conformance

Your Purchase Order No:039580

Dated: 5/22/2018

Our Order / Job No: 02AWT

Order Qty:2

Part Name:TOOL KIT, T/R PITCH CONTROL SHAFT BEARING REM/INSTALL

Part Number: RBW109-3130-85-133

Lot Size: N/A

Ship Date: 5/22/2018

We certify that these parts shipped to you are of domestic or international manufacture and conform to all requirements of the Purchase Order. These parts have been manufactured and inspected in accordance with all required specifications, instructions and drawings. Any applicable specifications are listed below:

Drawing Number: RBW109-3130-85-133

Rev: 1

Material Size and Type: (85-135)-1/6061 ALUM. -3/4140 Q&T STEEL; (85-105) -3,-5/4140 Q&T STEEL; (85-109) 6061 ALUM; (85-107) 4140 Q&T STEEL

Material Specifications: ALUM.: ASTM B221; STEEL: ASTM A108, ASTM A29

Heat Treatment: N/A

Plating/Finish: CLEAR ANODIZE: MIL-A-8625F, TYPE II, CLASS I; ZINC PLATE: ASTM B633, TYPE I, SC2

Mercury Contamination: The material used to process this order has not come in contact with mercury or mercury bearing instruments.

Date:

05/22/18

Signed:

PHGE Machine Works LLC dba Arrow Tech Machine Works

29751 E. Enid Rd. Unit C Eugene, Oregon 97402

Main: (541) 780-6938 | Fax: (458) 215-4938

www.atechmachineworks.com

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